RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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May 21, 2001

James Shafer, Remedial Project Manager
U.S. Department of the Navy
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway
Code 1823-Mail Stop 82
Lester, PA 19113-2090

RE: Draft Derecktor Shipyard Building, Project Close-Out Report for Various Removal Actions, Naval Station Newport, Newport, Rhode Island

Dear Mr. Shafer,

The Rhode Island Department of Environmental Management, Office of Waste Management, has reviewed the Close-Out Report for the Derecktor Shipyard sites. dated 16 April 2001. Attached are comments generated as a result of this review.

The Office of Waste Management understands that additional work remains to be done at the site, such as, the investigation and possible remediation of the former gas station. Therefore, this report is considered to be a documentation of the activities performed to date. If the Navy has any questions or requires additional information please call this Office at (401) 222-2797 ext.7111.

Sincerely,

Paul Kulpa

Paul Kulpa,

cc: Richard Gottlieb, DEM OWM
Kymberlee Keckler, USEPA
Melissa Griffin, NSN.

derwpremovals

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Draft Derecktor Shipyard Building, Project Close Out Report
For Various Removal Actions,

1. **Section G, Site Assessment Contaminated Detected;**
   Page 9, Whole Section.

   This section of the report lists the various hot spots found at the site and includes a brief discussion of the concerns and contaminants found at each location. In addition, the report should also note whether any of the contaminants found in these areas exceed regulatory guidelines. This clarification is necessary, as the report is a public document.

2. **Section G, Site Assessment Contaminants Detected;**
   Page 9, Whole Section.

   This section of the report (Site Assessment Contaminants Detected) list the various hot spots found at the site and includes a brief discussion of the concerns and contaminants found at each location. The following section (Operable Unit Background) lists the various removal actions that were performed in bullet format and includes a detailed discussion of each remedial effort. The titles that delineate the various investigation/removal locations for these sections do not correspond and/or it is not clear in some cases which remedial effort was designed to address a particular problem. As an illustration, the site assessment section notes that elevated levels of butylin compounds and SVOC were found beneath Building 42 due to discharges from sumps beneath the building, However, the Operable Unit Background Section only lists one sump, and the detailed discussion of the remedial effort does not note what was the contaminate found in the soil beneath the sump. This report is a public document, therefore these two sections should be modified so that it is clear what remedial effort was designed to address a particular remedial problem.

3. **Section B, Building 42 S 42, Sump Pit Removal;**
   Page 15, Initial Conditions.

   In the description of the initial conditions, the report should note what contaminants were present at the site.

4. **Section B, Building 42 S 42, Sump Pit Removal;**
   Page 15, Soil and Concrete Removal.

   "the ground surface was observed as consisting of a dense graded aggregate. Whether or not this soil supported water infiltration was not determined.... Soil was removed with a pick ax...."

The report states that the soil consisted of a dense aggregate that required removal via a pick ax. In addition it was reported a depression was not present immediate beneath the sump and that the area was relatively flat. Both of these conditions would have supported lateral movement of contaminants. Please indicate what were taken to determine the lateral extent of contamination prior to the removal actions. That is were headspace samples collected in the area prior to removal, was the area examined for preferential flow pathways, etc.

5. **Section B, Building 42 S 42, Sump Pit Removal;**
Page 16, Confirmatory Samples.

Please report the depth of the sidewall samples.

6. **Section C, Test Pit 14/ PCB Contaminated Soil Removal;**
Page 19,

The subsection, Initial Conditions, which describes the areas and contamination at this section of the site, was not included in the report. Please provide the omitted section.

7. **Section C, Test Pit 14/ PCB Contaminated Soil Removal;**
Page 19, Initial Excavation

The report describes the initial excavation carried out on the site. The depth of the excavation should be noted in this section of the report.

8. **Section C, Test Pit 14/ PCB Contaminated Soil Removal;**
Page 21, Field Investigation

This section of the report describes the collection of additional surface soil, subsurface soil, sediment, and concrete samples. However, a map depicting the locations of these samples was not provided. Please include a copy of the map in the report.

9. **Section C, Test Pit 14/ PCB Contaminated Soil Removal;**
Page 21, Field Investigation

The section of the report discusses the additional field investigation that was performed to investigate releases in the area. In the previous investigations exceedances were found for PCBs, SVOC, TPH and lead. This study was limited to PCBs. The report should state why the scope of the investigation was limited, and what measures were taken to insure that elevated levels of the other contaminants were not present at the sampling locations.

10. Section C, Test Pit 14/ PCB Contaminated Soil Removal; Page 21, Field Investigation

The section of the report deals with the additional soil, sediment and stone PCB samples that were collected from the site. The report has not included a map depicting the sample locations, although it does provide a description of the sampling. This description, at a number of locations has limited utility. As an illustration, the report notes that samples were collected starting twenty feet south of the railroad track and then every forty feet. However, the location of the railroad track is not depicted in the map. Therefore, as previous requested, please provide a map with the sampling locations.

11. Section C, Test Pit 14/ PCB Contaminated Soil Removal; Page 22, Expanded Investigation

The report notes that additional excavations were carried out in the Test Pit 14 area and under the loading dock. The previous investigations revealed exceedances in soils in the catch basin. The report should note whether these soils were removed. In addition, the report should note whether the catch basin functioned as a UIC, (that is had a hard or soft bottom and sides).

12. Section C, Test Pit 14/ PCB Contaminated Soil Removal; Page 24, Expanded Investigation

In accordance with the approved Work Plan, the samples were collected and analyzed for the following analytes; VOCs by USEPA Method 8260, SVOCs by USEPA Method 8270, TPH by USEPA Methods 8015 and 418.1, RCRA 8 metals, PCBs and Pesticides by USEPA Method 8080."

The above implies that all samples were analyzed for the full list of contaminants. This is not the case. All samples were analyzed for metals and VOCs, a subset of the samples underwent the full analysis. This should be noted in the report.

13. Section C, Test Pit 14/ PCB Contaminated Soil Removal; Page 24, Expanded Investigation

The previous investigation found exceedances for PCBs, TPH, SVOCs, and metals. Exceedances for VOCs were not found and in fact all of the VOCs were non detect except for toluene which was consistently detected at the exact same concentration in all samples. Based upon the previous sampling results, at a minimum, all confirmatory samples in the expanded investigation should have been analyzed for PCBs, SVOCs, TPH and metals. This was not the case. All of the samples were analyzed for VOCs (which was essentially not detected) and for metals, and only a subset of the samples underwent analysis for the full list of detected compounds. The report should explain why the confirmatory sampling effort was not directed towards the main contaminants of concern.

14. Section C, Test Pit 14/ PCB Contaminated Soil Removal; Page 24, Expanded Investigation

The report notes that exceedances were not found in certain sections of the site. As previously noted the confirmatory sampling effort was limited. Samples in the western, southern, eastern, and a portion of the northern sections of the main excavation effort were not sampled for PCBs, SVOCs or TPH (it should be noted that on other portions of the site where samples were analyzed for TPH, SVOCs and PCBs, the majority of these samples had exceedances for these parameters). As such, it has not been demonstrated that compliance has been reached in these areas and therefore additional work is warranted to demonstrate that the site is clean..

15. Section C, Test Pit 14/ PCB Contaminated Soil Removal; Page 24, Expanded Investigation

The report notes that confirmatory samples were collected from the base and the sidewalls of the expanded excavation area. A review of the information presented indicates that the confirmatory samples were not collected so as to provide adequate coverage of the areas of concern, (additional samples should have been collected and/or the samples were not properly analyzed along the northern, southern and western sidewalls). Accordingly, it has not been demonstrated that compliance has been reached in these areas and additional work is required to show that the remedial objectives have been obtained.

16. Section C, Test Pit 14/ PCB Contaminated Soil Removal; Page 25, Expanded Investigation

"The excavation continued south from the current location approximately 29 feet. The excavation also continued east into the drainage swale a distance of ten feet."

The above would imply that the excavation was expanded, however the area of excavation depicted in Figures 6 & 7 is the same. Please explain, and if necessary modify Figure 7 to show the expanded area of excavation.

17. Section C, Test Pit 14/ PCB Contaminated Soil Removal; Page 25, Expanded Investigation

"See Figure 7. Samples were collected from the sidewalls and floors of the new excavation resulting in a total of 8 samples."

The confirmatory sample locations do not correspond to the expanded area delineated in Figure 7. Please modify the report accordingly.

18. Section C, Test Pit 14/ PCB Contaminated Soil Removal; Page 27, Expanded Investigation

The report notes that one confirmatory sample exceeded the criteria for SVOCs and that

additional soil was excavated in this area. Please provide a map depicting the area of additional excavation, and the location of the final confirmatory sample.

19. Section C, Test Pit 14/ PCB Contaminated Soil Removal; Page 27, Expanded Investigation

The report states that a final confirmatory sample was collected above the water level that had collected in the excavation. The report should note whether this sample was collected at the same depth as the sample, which previously had an exceedance for SVOCs.

20. Section D, Building-42S42-5 Sump Pit Investigation and Remediation Confirmatory Sampling, Page 31.

In a previous comment package the following concern was raised, "The report states that jar headspace readings and Petro flag samples were collected along the pipeline and the results are presented in Table 1. There is no clear correlation between the jar headspace readings and the Petro Flag results, in that a high jar head space sample may have a low Petro flag result and vice a versa. The report should include a discussion explaining these observations (that is whether elevated levels of other contaminants were observed at locations with high jar head space but low Petro Flag results, was there any naturally occurring compounds which would generate high head space readings, etc)."

Rather than address the comment the Navy has eliminated the reference table and the discussion of the Petro Flag and headspace results from the report. Field observations and field tests are important elements of investigations and remedial actions. Petro Flag test kits have been used in the collection of confirmatory samples, and as such should not be considered as indictor tests. Therefore, the report should address the discrepancies between the field data.

21. Section 6.6,Confirmatory Sampling, Building-42S42-5 Sump Pit Investigation and Remediation Page 30, Paragraph 2.

In a previous comment package it was noted that, "A number of the samples collected along the pipe line had very high jar headspace results but were either non detect for VOC and SVOCs or had low levels of SVOCs and TPH. While it is normal to observe low levels of VOC, SVOCs and TPH with low jar headspace level, it atypical to find high headspace readings with low levels of these contaminates. The report should include a discussion that addresses the possible causes for this discrepancy."

The Navy has not addressed the comment. Instead, the discussions concerning the field and Petro Flag data have been eliminated from the report. The report must address the discrepancies between the laboratory and field data (the report should

state whether the laboratory samples were collected at the same depth and locations as the field samples, at the same time, etc).

22. **Section 6.6, Exploratory Trenching Former Disposal Pit, Page 35, Excavation and Sampling.**

As previously stated, "Information contained in the report indicates that Method 8015 M was used to test for TPH. This test method may undergo a variety of modifications by different laboratories. As normally required, the report must include all supporting documentation for this test method, that is range of petroleum products detected by this method, standards employed, run times, carbon range, GC for standards and site samples, etc."

The Navy has stated that the requested information has been included in the report. Please indicate which Appendix contains said information.

23. **Section 6.6, Exploratory Trenching Former Disposal Pit, Page 35, Excavation and Sampling.**

In a previous comment package the following concern was raised, "The report notes that elevated field readings were observed at the end of a number of trenches. As an illustration the report notes that the highest OVA readings was observed at the western extent of the primary trench. Test pits are designed to uncover areas of contamination. If elevated levels of contamination are observed at the end of a test pit the normal procedure is to extend the test pit in the direction of contamination. This is done not only to determine the extent of contamination but also to avoid problems with relocating the end of the test pit after it had been backfilled."

The Navy has responded that the pits were excavated to the original length specified in the work plan. Exploratory test trench, as their name suggests are designed to explore an area to determine if contamination exist. Terminating the investigation based upon a specified limit, in regardless of field observations, defeats the purpose of conducting the investigation. In the future, the work plan should be written so as to avoid this problem. Finally, it is recommended that this Close Out Report be modified as follows: Field evidence of contamination was observed at the extreme end of a number of test pits. Additional trenching to investigate these areas was not performed as the original work plan specified a maximum length for the pits.

24. **Section 6.6, Exploratory Trenching Former Disposal Pit, Page 38, Hot Spot Removal.**

The report states that confirmatory soil samples were collected from the hot spot removal area. As previously requested, please provide a map depicting the location of the hot spot removal area, the size/depth of the area, the location of the confirmatory samples, etc.

25. Section 6.6, Exploratory Trenching Former Disposal Pit, Page 38, Hot Spot Removal.

The State was present during the attempt to locate the hot spot for removal. At that time the map used by the Naval contractor for this task was inadequate, (map was a simple depiction of the area with few measurements). In addition, since the whole area had been disturbed and regraded it was difficult to determine the original test pit locations. Consequently, the initial effort was not in the correct location. Please provide the map or material, which was subsequently used to guide this aspect of the removal action to the correct location. The Navy has indicated that the sketch used to guide the removal action will be provided in the report. Please indicate which Appendix contains this sketch and other requested information.

26. Section 6.6, Exploratory Trenching Former Disposal Pit, Page 38, Hot Spot Removal.

During the second phase of the removal action, that is relocating the areas where the original test pits were dug, the elevated OVA readings, possible petroleum staining, or odor was not observed. That is the original test pits exhibited evidence of contamination and the subsequent efforts did not.

The Navy has stated that the time lapse and excavation activities would account for the lack of elevated OVA readings and observed petroleum staining observed in the initial test pits and the lack of these observations during the second test pit excavation effort. The explanation may apply to soils excavated from the test pits but it would not apply to any soils found on the edge of these pits (these soils were not affected by the excavation). It is also possible that the second test pits were not in the same location as the first. Please provide a sketch delineating the locations of both test pitting efforts (initial and hot spot removal) along with the information used to guide these efforts (field measurements or surveyed points efforts used to locate the initial and final test pits, etc).

27. Section 6.6, Exploratory Trenching Former Disposal Pit, Page 38, Hot Spot Removal.

The section of the report discusses the hot spot removal action. The discussion should include pertinate information such as whether there was any visual, olfactory, instrument or other field evidence of contamination, the depth of the confirmatory samples with respect to field observations made during the removal action or during the initial investigation which prompted the removal action, etc.

28. Section 6.6, Exploratory Trenching Former Disposal Pit, Page 38, Hot Spot Removal.

The report notes that confirmatory samples in the area of the hot spot were analyzed for TPH. Confirmatory analysis was limited to TPH despite the fact that